

# ABSTRACT

Into a housing (3) is hermetically inserted an annular piston (5), and into the annular piston (5) is hermetically inserted an output rod (8). A spring (14) located below the piston (5) moves the piston (5) upward for locking, pressurized oil in a release chamber (12) formed above the piston (5) moves the piston (5) downward for releasing. On an upper surface of the piston (5) is provided a pressing surface (38), on an inner periphery of a peripheral wall of the release chamber (12) is provided a first tapered surface (41), which narrows upward, and on an outer periphery of the output rod (8) is provided a second tapered surface (52), which narrows downward. Between the pressing surface (38), the first tapered surface (41) and the second tapered surface (52) are inserted a plurality of balls (55) circumferentially at intervals. Thereby, when the spring (14) moves the piston (5) upward for locking, a moving stroke of the output rod (8) is larger than that of the piston (5).